

Serial No. 09/497,801
Docket No. YOR919990201US1

REMARKS

Claims 1-7, 21 and 25-37 are all of the claims presently pending in the application. Claims 2 and 32-36 have merely been editorially amended, and have not been substantively amended to more particularly define the invention.

Entry of this Amendment is believed proper since no new issues are being presented to the Examiner which would require further consideration and/or search.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-7, 21 and 25-37 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Porter (U.S. Patent No. 6,473,892). These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention (e.g., as defined by exemplary claim 1) is directed to a method of linking domain knowledge to document knowledge. The method includes rendering document knowledge as textual components with variable fields, building an object-oriented domain model including domain knowledge and linking the document knowledge to the domain knowledge by linking the domain knowledge to document knowledge variables.

Conventional document assembly systems represent documents as collections of paragraphs of text. Domain knowledge is captured as answers to a collection of user input questions. These answers are used to select and assemble a series of document components. The series of questions and their answers are not organized as an object model, and hence has no structure.

Object modeling is a technique for modeling software systems. In an object model a domain is broken down into discrete entities called objects. Objects, in turn,

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possess attributes that represent properties of the object. The object model is used to describe the domain elements that a document's text directly or indirectly refers to, the object model may be captured and linked to the document. The lack of an explicit mechanism for linking a document variable to an expression that facilitated reference to any element in the object model discourages the use of powerful object modeling techniques for independently representing the domain content of a document.

The claimed invention of exemplary claim 1, on the other hand, provides a method of linking domain knowledge to document knowledge that includes rendering document knowledge as textual components with variable fields, building an object-oriented domain model including domain knowledge and linking the document knowledge to the domain knowledge by linking the domain knowledge to document knowledge variables (e.g., see Application at page 4, line 17 through page 5, line 2).

These features provide a dynamic document-to-domain linkage that allows different domain knowledge elements to be dynamically manipulated during the interactive configuration of a document (see Application at page 5, lines 13-15). This allows the user to edit text as the user would in a regular word processor while maintaining constant and dynamic access to information provided by the document system (see Application at page 6, lines 11-13).

II. THE PRIOR ART REFERENCE

The Examiner alleges that Porter teaches the claimed invention of claims 1-7, 21 and 25-37. Applicants submit, however, that there are elements of the claimed invention which are neither taught nor suggested by Porter.

That is, Porter does not teach or suggest "*building an object-oriented domain model comprises domain knowledge*" as recited in independent claim 1, and as similarly recited in independent claims 21, 25 and 37.

The Examiner attempts to rely on Figures 1-10 and column 1, line 1 through column 20, line 34 of Porter to support his allegations. The Examiner, however, is clearly incorrect.

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That is, nowhere in this passage nor these Figures (nor anywhere else for that matter) does Porter teach or suggest building an object-oriented domain model including domain knowledge. Indeed, Porter merely teaches a document assembly system similar to that described in the Description of the Related Art section of the Application (see Application at page 2, line 1 through page 4, line 6).

That is, Porter merely discloses a document assembly system that creates a document by selecting specific paragraphs of text and inserting them into a document based on a user's input (Porter at column 6, lines 51-60). The inputted data is structured in an input data object, which is consulted by an interpreter when the interpreter prepares documents and adjusts the content of the documents accordingly (Porter at column 7, lines 11-20). A plurality of form generators include source code indicating the circumstances under which the interpreter is to generate the associated document. A compiler generates a separate form object for each form generator. Each form object, when executed by the interpreter, generates a separate document (Porter at column 7, lines 28-60).

In other words, Porter automatically produces one or more documents corresponding to a single, specific transaction (see Porter at column 3, lines 29-31). The document assembly system of Porter determines which documents are needed for a particular transaction, determines which paragraphs should be included in each document and generates the text of each document paragraph. The document assembly system merely selects which documents and paragraphs of text from a document database should be used based on information input by the user. Similar to the conventional assembly systems discussed in the Application, the data input by the user is not organized as an object model.

The Examiner points to column 7, lines 11-27 of Porter to support his allegation that Porter teaches "*building an object-oriented domain model comprising domain knowledge*". This passage in Porter merely teaches that the data input from the user is organized by an interpreter which consults the data to determine which documents should be created for the specific transaction.

In contrast, the claimed invention teaches building an object-oriented domain model that includes domain knowledge. The claimed invention creates a domain model

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that is independent from the documents being created that may be used later to create additional documents in different transactions, and is not limited to being used in a single transaction, as is taught by Porter.

Furthermore, Porter does not teach or suggest that “*said domain knowledge elements are dynamically bound to said document knowledge variables through an object model access expression*” and “*enforcing the link between said domain knowledge and said document knowledge whenever a change occurs in at least one of said object model access expression of one of said document knowledge variables and said domain model*” as recited in exemplary dependent claims 27 and 29, respectively.

An important benefit of the dynamic aspect of document-to-domain linkage is that different elements of a domain model may be dynamically manipulated (e.g., deleted, inserted or replaced) during the interactive configuration of a document. This benefit is not achieved by Porter.

That is, Porter does not provide for an interactive configuration of a document. Once the user inputs the initial data, the document assembly system of Porter automatically determines which documents are needed for a particular transaction, automatically determines which paragraphs should be included in each document and automatically generates the text of each document paragraph. Thus, there is no interactive configuration of a document by Porter.

Furthermore, once the data is initially input into the system in Porter, it is not changed during the document assembly. Therefore, Porter clearly does not teach or suggest enforcing the link between the domain knowledge and the document knowledge whenever a change occurs in at least one of the object model access expression of one of the document knowledge variables and the domain model.

Therefore, Applicants submit that there are elements of the claimed invention that are not taught or suggest by Porter. Therefore, the Examiner is respectfully requested to withdraw this rejection.

IV. FORMAL MATTERS AND CONCLUSION

In response to Examiner's objections, the specification and claims have been amended in a manner believed fully responsive to all points raised by the Examiner.

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In view of the foregoing, Applicants submit that claims 1-7, 21, and 25-37, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: January 24, 2005



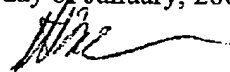
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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment by facsimile with the United States Patent and Trademark Office to Examiner William D. Hutton, Jr., Group Art Unit 2762 at fax number (703) 872-9306 this 24th day of January, 2005.



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